ILJIN Diamond

IPOL

ILJIN Polycrystalline Diamond

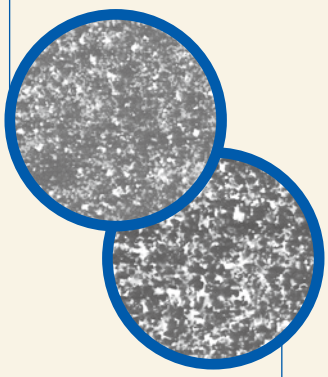
Grade

Impact resistance

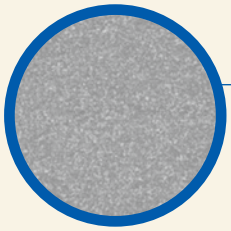
Wear resistance

CUFII

Diamond size: 2μm
Diamond content: 90%
Higher wear resistance than CUF



XUFII



Diamond size: <1μm
Diamond content: 92%
Excellent impact resistance and easier tool fabrication

CMW

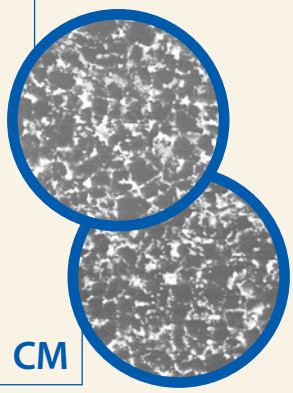
Diamond size: 10μm
Diamond content: 90%
General purpose, easy wire cutting and good impact resistance

CFW

Diamond size: 4μm
Diamond content: 90%
Good surface finishing

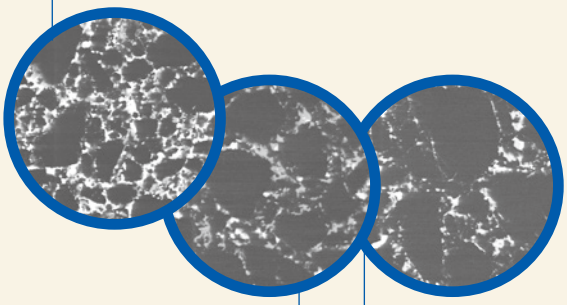
CCW

Diamond size: 25μm
Diamond content: 90%
Good wear resistance with special binder and diamond bonding



CM

Diamond size: 10μm
Diamond content: 92%
General purposes for Al and Al-Si alloy



CXLII

Diamond size: <40μm
Diamond content: 95%
Specially designed for superior wear resistance

CXL

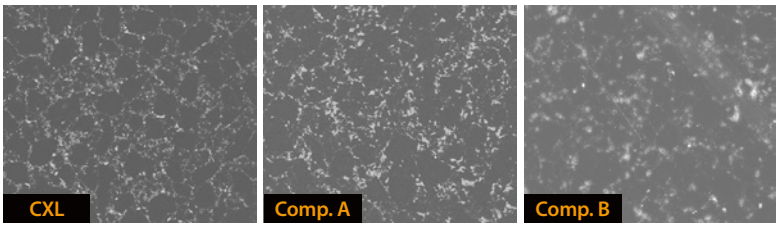
Diamond size: 25μm bi-modal structure
Diamond content: 95%
Excellent wear resistance with strong diamond bonding

CXL

ILJIN Diamond

Introduction

- Diamond size: 25㎛ bi-modal structure
- Diamond content: ~95%



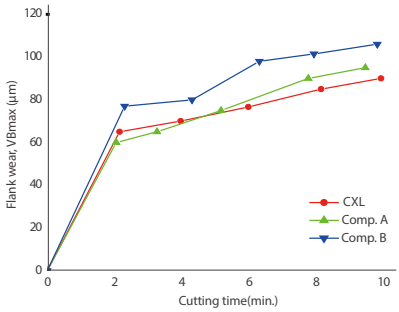
Characteristics & Application

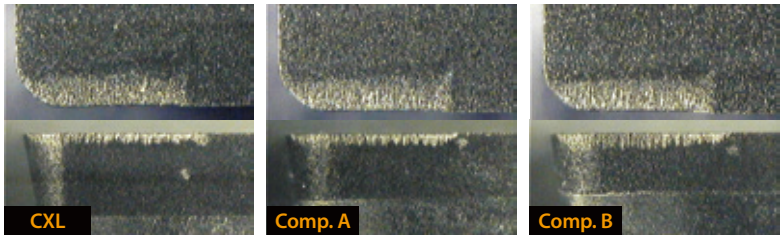
- Excellent wear resistance with strong diamond bonding

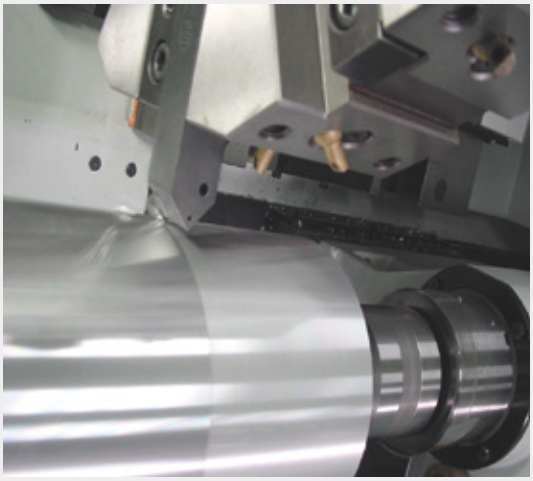
Perfomance - Continuous turning

Material	DURALCAN (Al-20%SiC)
Speed	500m/min
D.O.C	0.5mm
Feed	0.2mm/rev
Coolant	Dry
Insert type	SPGN090304
Holder type	CSDPN2525-M12

*Hannover university test







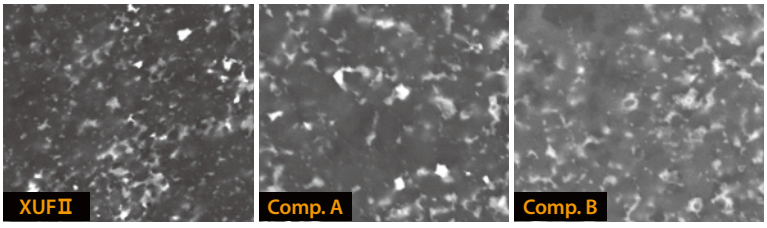
Continuous turning

XUFⅡ

ILJIN Diamond

Introduction

- Diamond size: <1㎛
- Diamond content: ~92%



Characteristics & Application

- Excellent impact resistance and easier tool fabrication
- Superior uniformity between grains and binders
- Diamond size <1㎛, diamond content over 90%
- Optimized sintering processing for controlling microstructures
- Excellent wear, impact and chipping resistance
- High precision machining and long tool life, good fabrication
- Applicable Al part and non-ferrous alloy (Ti, Cr, Cu alloy, ceramics, etc.)

Perfomance - Face milling

Material	MMC(Al-20%SiC)
Speed	1,000m/min
D.O.C	0.5mm
Feed	0.25mm/rev
Coolant	Dry
Insert type	CDEW1504R-XAF
Cutter	APD125R-A8Z, Ø125